

REMARKS

This amendment is submitted after and responsive to the final rejection of all claims in the recent final rejection.

In the event that this amendment is received without an attached Request for A One Month Extension of Time to Respond to the Final Rejection, this amendment shall serve as a duplicate request.

Applicant thanks the Examiner for the over-the-phone interview granted to Applicant's Attorney.

The amendments to the specification include minor explanatory changes inserted to explain the subject matter contained in the specification as filed and to correct and change selected reference numerals. The amendments to the specification do not include any prohibited new matter.

The above referenced final rejection finally rejected all claims of record under 35 USC 103(a).

Claims 1 and 2 were rejected as being unpatentable over Hsiung (USP 6,481,332) in view of Ushiwata et al. (U.S.Pub. 2001/0049988A1) referred to as Ushiwata.

The Examiner states that Hsiung teaches the invention substantially as claimed, citing a base, a frame 12, 15, a motor 17 carried by the frame, a rotary blade 11 a cutting line indicator fixed to the frame having a container 20 and a single alignment screw 22 having threaded members, a lighting unit 3 comprising a light source 31 having a first lens and a second lens 32.

It is further stated that Hsiung fails to teach that the second lens is rotatable. Ushiwata is stated as teaching a lighting unit having a rotatable second lens 59 for adjusting a width of the light beam.

Hsiung does, in fact, disclose a marking device for projecting a light beam onto the surface of the workpiece to be sawed or cut.

However, Hsuing does not disclose nor describe the device in a manner enabling one of skill in the art to make or use the lighting device.

Hsuing discloses a device which has a single lens, lens 31 described as a cylinder lens. From Fig. 3 of Hsuing it is apparent that the lens 31 is incapable of redirecting the light into a fanned light beam as described and unless the light is already spread into a linear line of light, does not explain how the lens disclosed will direct the light into a line of light projected on a work piece. If the light has been preformed into the line of light, there is no disclosure present in the specification of Hsuing to support such a teaching or conclusion.

Further, Hsuing disclosed a light beam which is not projected onto the work piece in a position to illuminate the workpiece where the kerf will be formed when the saw blade is lowered into engagement to cut the work piece.

Figure 3 shows the light line 41 projected at an oblique angle onto the workpiece while the saw blade is positioned to drop vertically thru the workpiece and into the receiving groove in the supporting stage.10.

Clearly the Hsuing patent fails to provide an enabling disclosure as to 1) how the light is generated, 2) how the light is positioned relative to the saw blade, and 3) how the light beam 41 is formed.

As a primary reference, Hsuing is defective and lacks an enabling disclosure of its purpose and the embodiment is not workable without a substantial increase in and the correction of the disclosure.

Accordingly the final rejection of claims 1 and 2 should be withdrawn and the claims allowed forthwith.

Referring now to the Ushiwata publication identified above, the disclosure of this publication

teaches the alignment of the light line with the inside of the kerf or the outside of the kerf and whenever the alignment of the light line, L1 is inside the kerf to be formed in the workpiece and not of the same width as the kerf. The alignment of the light line is required to align the light line with the edge of the mark placed on the work piece by the operator while marking the length of the part being cut.

The width of the line is selected by the operation of the control arm 59A to move the lens 59. However, there is no disclosure contained within the specification of drawings that it is important or desirable to form the light line to the identical width as the kerf.

The lens of the Applicant's device is set to form the light bar exactly to the kerf width and permanently fixed to the barrel within which it is contained.

Additionally the small movement of the lens in a rotational direction as controlled by the threads 41G in figs 37 and 38 of Ushiwata will not allow the lens to shift from position I to position J as shown in Fig 38. Thus the device disclosed by Ushiwata will not function for cutting the desired length on either side of the blade 22. The result of the Ushiwata device is a precise cut on the left side of the blade but an inaccurate length cut on the right side of the blade of the saw.

Ushiwata does not illuminate the width of the kerf and thus does not provide the illumination of the cut or kerf of the saw blade. Ushiwata teaches that the illumination of the light beam will be only at the left edge or right edge of the kerf and can be placed either inside the kerf or outside the kerf as taught in Figs. 6(a), 6(b), 7(a) and 7(b) where the illuminated region is L1. Illumination L1 is not taught to illuminate the entire kerf and therefore does not meet the requirements of the Applicant's claims.

Further, the normal vibration of the saw operation will cause the width W2 of the light beam to change and be displaced relative to the saw blade 22. The width of the light beam W2 is not critical to the operation of the device in Ushiwata because the light beam is aligned with operator provided mark such that the light beam is positioned on the left side or the right side of the kerf

edge and must be consistently used to cut a finished piece on the left of the blade if the mark L2 placed on the workpiece by the operator by pencil.

According, the Ushiwata reference when combined with the non-enabling disclosure of Hsiung does not teach or suggest the claimed subject matter of the Applicant, and claims 1 and 2 are allowable over the combined references of Hsiung and Ushiwata.

Claim 3 has been rejected under 35 USC 103(a) as unpatentable over Hsiung combined with Ushiwata in view of Cook, USP 4,158,222. Hsiung and Ushiwata were addressed above and applied to claims 1 and 2.

Cook is cited for the teaching of a sinusoidal surface 72 and 74 on lens 34 for the purpose of intensifying the light beam. Cook shows a sinusoidal surface on the second surface of the lens with a Fresnel lens on the first surface of the lens.

The light beam in Cook is not intensified by the second surface of lens 34 as alleged by Examiner. Rather, the second surface of the lens 34 acts to spread the light beam in a vertical plane so that the light can be seen at a greater distance than if the the light beam was intensified or concentrated into a smaller cross sectional area. This allows an elongated line of light, not an intense wspot of light to illuminate the work piece.

The intensification of the light beam of Cook is not an issue in the Applicant's claims.

The claimed lens of Applicant has a first surface that has a sinusoidal form and is used for diffusing the light beam in a linear manner forming the light beam that illuminates the workpiece with a bar or line of light that extends for a distance across the workpiece; however, the light bar or line is not affected with respect to the width of the beam of light. This is required in order to present a uniform width illumination zone as a marking line of light on the workpiece.

If the light beam varied in width as a function of the distance from the light source, then the

utility of the device would be limited and the marking of the workpiece would be ambiguous. This condition is overcome by the manipulation of the light beam by the lens defined in the claims of Applicant.

Claim 3 is clearly allowable in view of the distinctions contained within the claim and the allowability of claims 1 and 2.

Claim 4 is dependent upon claim 3 and as a dependent claim is entitled to allowance based on the allowance of the claim upon which it is dependent.

Referring now to Claim 5, Examiner has rejected this claim citing Hsiung for the teaching that "the first lens in Hsiung produces a spot of light and the second lens 32 produces a light line."

Applicants Attorney has studied the Hsiung reference in detail and cannot find a reference to a "first lens." The only lens identified in the specification is the lens 32. The disclosure of Hsiung does not disclose a "first" lens and a "second lens."

The reliance by Examiner on Hsiung for a teaching of a first lens and a second lens where the first lens produces a spot of light and the second lens 32 produces a light line is improper.

Accordingly, this rejection of claim 5 should be withdrawn and the claim indicated as allowable.

Claim 6 and claim 7 are each dependent upon Claim 5 and as such should be allowable based on the allowability of Claim 5. Accordingly, Claims 6 and 7 should be indicated as allowable.

Claims 8 and 10 were rejected as unpatentable over the spatial relationship of the placement of the container disclosed in Hsiung.

Claims 8 and 10 are allowable because they are dependent upon allowable claims 1, 2, 3, 4, 5 and 6 as argued above. As dependent claims, claims 8 and 10 are similarly allowable through the

inclusion of all limitations of the claims from which they directly or indirectly depend.

Accordingly, Claims 8 and 10 should be indicated as allowable for the same reasons that the preceding claims that they depend from are allowable.

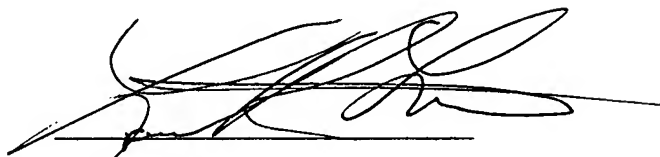
Similarly, claims 9 and 11 which were rejected as unpatentable over the spatial relationship disclosed in Hsuing, should be allowed for the same reasons as Claims 8 and 10 as they also contain all the limitations of claim 1, 2, 3, 4, 5 and 6.

Accordingly, Claims 8 - 11 should be indicated as allowable.

Applicant respectfully requests that the Examiner give careful consideration to the remarks of Applicant's Attorney, reconsider the rejections and allow all claims of record.

RESPECTFULLY SUBMITTED

Thomas E. Walker

A handwritten signature in black ink, appearing to read 'Laurence R. Letson', is written over a horizontal line.

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